

Claims

1. Method for effecting wireless communication between radio
5 stations in which a purely bilateral communication connection (Con)
or a purely bilateral communication relationship (Rel) is to be
established between a first radio station (FS1) and only one
particular second radio station (FS2) out of a group (FS2a, FS2b to
FS2k) of second radio stations,
10 characterised in that
an operating parameter or plurality of operating parameters of the
first radio station (FS1) is changed with the aim of influencing the
transfer characteristics between the radio stations in such way that
as a result of changing at least one operating parameter the
15 transfer characteristics of only one particular radio connection of
the first radio station (FS1) to only one particular second radio
station (FS2) fulfil a defined quality criterion.
2. Method according to Claim 1, in which an operating parameter that
20 can be changed is the transmission power of the first radio station
(FS1).
3. Method according to one of the preceding Claims, in which an
operating parameter that can be changed is the reception sensitivity
25 of the first radio station (FS1).
4. Method according to one of the preceding Claims, in which the
quality criterion consists of exceeding a minimum receive field
strength at the first radio station (FS1).
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5. Method according to one of the preceding Claims, in which one or
more operating parameters of the first radio station (FS1) are
initially chosen so that a plurality of second radio stations fulfil
the quality criterion, and in which the operating parameter or
35 operating parameters are changed in steps until finally only one
particular second radio station (FS2) still fulfils the quality

criterion.

6. Application of a method according to one of the preceding Claims, for establishing a communication connection (Con) between a service terminal (ST), in particular a cash-desk system, having a radio module, and a customer device (CD), having a radio module (WM), in particular a mobile telephone (MP) or an information technology device (ITD) such as the type known as a personal digital assistant (PDA), such that a communication connection of the service terminal is to be established with the customer device which is the closest to the service terminal out of all the radio stations and customer devices concerned.

7. Application according to Claim 6, in which

- a) the service terminal (ST) initially knows nothing about the address or identifier of the customer device (CD),
- b) the customer device (CD) initially knows nothing about the address or identifier of the service terminal (ST), and
- c) even in subsequent stages of the communication between the two devices, no such addresses or identifiers are input from outside.

8. Application of a method according to one of the preceding Claims, for establishing a communication relationship (Rel) and/or a communication connection (Con) between

- a) a base station (BS) of a cellular or other wireless communication system, having (at least potentially) several or alternating subscriber stations (SM1, SM2 to SMn), in particular a cordless telephone system to the DECT standard,
- b) and a subscriber station (SM1) of such a wireless communication system, in particular a mobile telephone (MP), a cordless telephone (CLP) or an information technology device (ITD) such as the type known as a Personal Digital Assistant (PDA), such that a communication relationship and/or communication connection of the base station is to be established with the subscriber station which is the closest to the base station out of all the subscriber stations concerned.

9. Application according to Claim 8, in which

d) the base station (BS) initially knows nothing about the address or identifier of the subscriber station (SM),

e) the subscriber station (SM) initially knows nothing about the

address or identifier of the base station (BS), and

even in subsequent stages of the communication between the two devices, no such addresses or identifiers are input from outside.

10. Method according to one of the preceding Claims, in which at

least one of the participating radio stations transmits a signal containing information about the radio station concerned or its user.

11. Method according to one of the preceding Claims, in which the

first radio station transmits a request to send a response, and in which the range of the transmit signal used is reduced until only the response of a single second radio station can still be received, thus ensuring that only a single second radio station can be located in the transmission range of the first radio station.

12. Method according to Claim 11, in which the range is reduced by lowering the transmission power.

13. Method according to Claim 11, in which the range is reduced by shielding, in particular with the aid of a mechanical plug-in device.

14. Device for carrying out a method according to one of the preceding Claims, having the following features:

a) a radio module for sending and receiving electromagnetic signals;

b) a device for controlling at least one operating parameter of the radio module, which can influence the transfer characteristics of the radio connection in such a way that as a result of changing at least one operating parameter the transfer characteristics of only one particular radio connection of the first radio station (FS1) to only one particular second radio station (FS2) fulfil a defined

quality criterion.